

DEPARTMENT OF HEALTH AND PUBLIC WELFARE
DIVISION OF PUBLIC HEALTH NURSING

# Advice for Teachers and Parents

in the

Prevention, Care and Control of Communicable Diseases and the Promotion of Health



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DIVISION OF PUBLIC HEALTH NURSING

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Public Health Regulations.

Vital Statistics Act.

Manitoba Baby Book.

Manitoba Mothers' Book.

Quarantine Regulations re Communicable Diseases.

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## Co-operation in the Prevention and Control of Communicable Diseases

HE Province provides education and makes it by law compulsory; it is therefore the duty of both health and educational authorities to see that school children suffer no avoidable impairment of health in consequence of school attendance.

The teacher has at heart the interest of the children, and should have the elementary knowledge necessary to promote the physical welfare of the pupils entrusted to his or her care during a number of hours each day at a most vital period of their lives.

The teacher does not fulfil all the obligations of the position by simply giving school children mental and moral training, but, in addition, should consider their eye-sight, their growing bodies as they sit at their desks, the air they breathe, the temperature of the school room, the water and water cups, the proper care of sanitary conveniences, the bodily cleanliness of the pupils, and all things which concern their physical well-being. The teacher ought to be prepared to share the work of the health authorities in detecting, perhaps before anyone else has a chance to do so, the presence of any of the communicable diseases to which little children are especially susceptible; and to assist in their control.

Communicable Diseases. The assembling together of children in classes affords a good opportunity for those in charge to notice the presence of anyone who may be in the first stages of some communicable disease, and thus help greatly in arresting its spread.

Communicable diseases are incited by minute living bodies, called "germs," which gain entrance to the body, multiply in it and produce poisons which are the chief cause of the symptoms which characterize the different diseases. Such diseases are also called "infectious" and sometimes "contagious."

During the course of many of these diseases the living germs are set free from the body in its discharges, and thus through ignorance or carelessness may be conveyed or "communicated" from the sick to the well. It is thus actually not the disease, but the inciting agent of the disease, which is communicated.

**Germs.** Germs do not develop spontaneously, nor are they evolved from dust or dirt. Germs come from germs, so that, if it were possible to kill off all the germs of a disease there would be no more cases of that disease.

Disease germs leave the body in various ways; in the discharges from the nose and throat, in the expectoration, in the act of sneezing or coughing, in the urine and in the discharges from the bowels. They come always from just one source—from the bodies of human beings. The people who sow these dangerous seeds may be sick themselves or they may be coming down with disease, or they may be getting over it. Sometimes we find human "carriers," as they are called, who have had a disease years before or, so far as can be discovered, have never had the disease at all, and yet are cultivating disease germs in their bodies and distributing them to infect others.

The disease germs are accustomed to the warm, rich fluids of the body and do not live long away from it. The great danger lies in a rather direct transfer of infected material from one person to another. There are three principal agents by which this transfer is brought about and by which diseases are commonly spread. These have been alliteratively described as Food, Fingers and Flies.

It requires more than the germ to induce a case of disease. Germs of the most virulent diseases often exist in the nose, throat or intestinal canals of persons who show no signs of being anything but healthy individuals. To contract the disease the tissues of the body must be in a condition to permit the rapid growth and multiplication of the germs and the consequent formation of the poisons which produce the disease. Thus we must have not only the seed, but a suitable soil for its development.

The most effective measure for keeping disease germs away from healthy persons is to destroy them at their sources, that is, to control the discharges and wastes of persons affected with these maladies. This is one of the most important of the duties of physicians and nurses and health officials, and also of parents and teachers who may have the sole responsibility for such diseases in the earliest stages.

Since some cases of disease or carriers are always likely to escape detection, the care of those known to be sick must be supplemented by the cultivation of habits of personal cleanliness on the part of the well. The cardinal principle of disease prevention is that nothing shall go into the mouth which is not known to be bacteriologically clean. Few people realize how often fingers, pencils and all sorts of objects go to the mouth, and the breaking of such habits is one of the most effective methods of sanitation. Food, druk and the tooth brush are the only things which should pass the gateway of the lips, therefore they and the utensils and the fingers with which they must be handled should be clean and free from the most dangerous kind of dirt, the pollution from other human mouths and other human hands.

Furthermore it is important not only to keep disease germs away from the body as far as possible, but also to maintain such a condition of health that the germs will not grow, even if they enter the body.

Lack of fresh air, an insufficient supply of nourishing food, improper clothing, and mental or physical fatigue put the body in condition to acquire disease. On the other hand resistance to disease is developed by an abundance of fresh air, nourishing food, pure drinking water, a reasonable amount of exercise and play, in the open air if possible; clothing suited to the weather conditions, personal cleanliness and regular habits in answering the calls of nature. The teacher should encourage health habits and should not allow the children to become tired and fatigued during school hours.

If a single case of communicable disease appears in a school, there is always a danger that other cases will follow unless immediate steps are taken to remove the child, who should be rigidly excluded from school and isolated.

It will be observed from the following description of the more serious communicable diseases that the most common early symptoms is a "cold." If all cases of apparently acute colds were excluded from school until it is proved that they are not the early symptoms of some of these more serious diseases, epidemics would be far less common than at present. If the children in a classroom are prone to have colds, there is a reason for it. Ask your Health Officer and the Public Health Nurse to advise you. Colds are dangerous.

Inspection of Children. Early in the daily school session teachers should observe the general condition of every pupil. Any who are not well should be separated from the class until it is found out whether they are suffering from a communicable disease. The reason for the absence of a pupil should always be ascertained. Careful questioning of the other children often discloses a case of communicable disease, and such an inquiry impresses on the children the importance of controlling these diseases.

The Teacher and the Health Officer. The teacher should promptly notify the Health Officer whenever a case of suspected communicable disease is discovered at school or is reported as the cause of absence, in order that he may determine the source of the disease and keep under observation those who have been exposed.

Non-immune children who have been exposed to the same source should be excluded and kept under observation during the period in which the onset of the disease may occur. The control of "contacts"—those exposed—is an essential feature of communicable disease control.

The Health Officer ought to notify teachers of such diseases in families where there are school children. In other words, the teacher and the Health Officer should work together to prevent disease and to promote the health of the children.

Section 243 of the Public Health Act requires all teachers to exclude any person residing in or coming from a house placarded by the Health Officer for a communicable disease, until such person presents a written permit from the Health Officer to attend or re-enter school. In any case, where a teacher has reason to believe, and does believe, that a communicable disease exists in the domicile of any pupil attending school, such teacher shall report the fact of such belief to the Health Officer, and shall forthwith exclude such pupil from further attendance until he produces a permit from the Health Officer to do so.

Section 304 of the Public School Act states:

"No person suffering from any contagious or infectious disease, or who is affected with any skin disease or vermin, or who resides in a house in which any contagious or infectious disease, vermin or skin disease exists, shall be entitled to attend or enter any public school during the existence of such contagious or infectious disease, vermin or skin disease, nor at any time thereafter until he present to the trustees of the school he wishes to attend, a certificate of a physician that there is no longer any danger to the other pupils of the school of contagion or infection or of being affected with any skin disease, or vermin from his attendance."

Section 305 of the Public School Act states:

"Any person or guardian of any child who knowingly sends such child to any public school, in contravention of the provisions of the last preceding section, shall be hiable for each offence to a fine not exceeding ten dollars. R.S.M. c.143. s.262."

In rural communities with no continuous health inspection, the responsibility for the reporting of cases of communicable disease to the Health Officer must of necessity lie with heads of households, and teachers of schools, in those mild cases, where pupils are not sick enough to have a physician called.

Closing of Schools or Classrooms. If a case of communicable disease is discovered at school, the Health Officer will determine whether it is necessary to close the entire school or only the classroom. Both of these measures should be avoided if possible. At school the children are under control and observation, and, moreover, the teacher may be able to discover cases that exist in households not known to the Health Officer or the Public Health Nurse. When the school is closed, the disease may spread more quickly because the movements of the scholars are unrestricted.

Communicable disease in schools cannot be controlled without the hearty co-operation on the part of the school and health officials, the family physician and parents.

With the desired co-operation, communicable diseases among school children can be controlled; and the school, instead of being the focus for the dissemination of such diseases, may become one of the most valuable agencies for limiting their spread in any community.

#### Sanitation

In spito of every effort to make the school rooms sanitary and healthful, and notwithstanding the precautions to exclude children suffering from communicable diseases, such children are frequently seen in our schools. It is therefore necessary that the teacher should constantly bear in mind the fact that any child, though ill or even indisposed, may be a source of danger to its schoolmates; therefore children should be seated as far apart as practicable. Individual books should be used. Each child should be provided with an individual drinking cup. There is no doubt that the gorms of disease have often been transmitted by the common use of a cup or dippor. For the same reason pencils should not be exchanged, and pupils should not be allowed to put pencils in their mouths. Children should be cautioned against exchanging chewing gum or eating anything (fruit, candy, etc.) which has been near another person's mouth. Spitting on the floor should, of course, be prohibited by the teacher. Kissing and coughing or sneezing in the face or over the hands of another child are common methods of transmitting communicable disease. Prevention of Communicable Diseases is possible only where there is sincere effort, and full co-operation of every man, woman and child in a community.

## Regulations Prohibiting the Use of Common Towels and Common Drinking Cups in Public Places

No person, firm or corporation shall hang or place, or cause to be hung or placed, any towol or other material which could be used for the purpose of a towel, in any place in any department or other store, building, hotel, lodging or boarding house, restaurant, cafe, factory, workshop, railway station, public conveyance by land or water, public school, church, theatre, barber shop or other public place where more than one person could use the same for said purposes: Provided this regulation shall not apply to paper towels, which are to be discarded after use by one individual, or to towels of such size that they can properly be used but once, and if placed in sufficient quantity to accommodate all persons who may desire to make use of them.

The use of the common drinking cup, or common receptacle for drinking water, in any public institution, hotel, theatre, factory, departmental or other store, public hall, office building, railway station, public conveyance by land and water, or other place where people congregate, or the furnishing of such common drinking cup or common receptacle for use of any such place as herein mentioned, is hereby prohibited.

Location of School Plant. Dry or thoroughly drained; avoid proximity to marshes or other insanitary surroundings.

No school should be over three stories high, and should have wide, straight and well-lighted stairways and corridors. All doors should open outwardly to reduce the danger from accidents in panies from any cause, and exits should be free from obstruction.

Appearance—Attractive, iu order to be in keeping with the high purpose it serves. Pictures, plants and books add beauty and cheer to the school room.

School-room Space—A minimum of 15 square feet of floor space per pupil, and a minimum of 180 cubic feet of air space for each pupil.

Ventilation. Air-Fresh, warm, moist, without dust or draft.

Window Ventilation—Open windows in and upward, otherwise uso window boards or muslin screens to introduce air without draft. Open windows farthest from pupils during school hours. Open windows before morning classes, during recess, at noon, during physical exercises, including marching, and when cleaning. Lower windows from top to provide an escape for used air.

Secure moisture in the air by placing water in a pan on the stove or in the warm air inlet.

It has been found that the system of ventilating school-rooms by fresh, untreated outdoor air, admitted at the windows with gravity exhaust duets for removing vitiated air from near the ceiling, is the most generally satisfactory method of school ventilation.

When ventilating appliances are installed, they are required to provide 25 cubic feet of fresh air per minute to each pupil.

The cellar or basement should also be well ventilated.

**Lighting.** Light—Adequate, without glare, and introduced over the left shoulders of the pupils from the upper part of the windows.

Window Space—One-sixth of floor space, the bottom of the windows to be about three feet six inches above the floor line. The tcp of the windows should be as high above the floor as the room is wide.

Walls—To be unbroken to the front and right of pupil, and furnished with black-board. Suitable colors for the walls are light grey, green or buff color, and the ceilings should be lime-washed.

Blackboards—Without gloss, and in gcod condition, the lower edge to be not more than two feet and nine inches from the level of the floor. They should not be placed next to or between windows.

Water Supply. Water Supply—Free from impurities, protected from surface drainage, and sufficient for drinking and washing purposes.

Drinking Fountains—That do not allow the contact of mouth with the fountains. Water Containers—Provided with a fawcet and cover, cleaned and scalded at least once a week.

The Well—Covered, cleaned frequently, and provision made for drainage of waste water away from the well.

Washing Facilities—Basin, paper towels and soap. The water heated to supply moisture to the air may be used for washing hands during the Winter season. The proper use of washing facilities is of great importance in maintaining healthful conditions in the school.

**Heating.** Temperature—Constant, 68° to 70° F., equally distributed by circulation, rather than radiation. If a child is not comfortable in this temperature, see that he puts on more clothing, rather than raise the temperature of the room.

Place stove as low as possible in the coldest corner of the room with the jacket extending four inches above the floor level, and four inches above the stove.

Place the thermometer where the pupils are seated.

High temperature lowers vitality. Low temperature causes sickness. Watch the class-room thermometer!

**Equipment.** Desks and seats should be separate and adjustable, or of different sizes to fit the pupils. Foot-rests should be used where necessary, until proper desks can be provided. Seats should be shaped to fit the natural curve of the body. The base of the spine should rest against the back of the seat.

Clothing Pegs—A sufficient number for each pupil's wraps is required, separated to avoid contact, adjusted to the size of the pupils, and placed so that wraps may be kept warm during the Winter months.

A folding stretcher or couch is needed, especially in the rural school.

First Aid Supplies should be in every school. See "Directions for First Aid for the Use of Teachers."

Playgrounds and Out-Buildings. Grounds cleared of all objects that would be a menace to the pupils, accumulations of refuse, all holes filled in to avoid accidents, and pools of stagnant water; and beautified by planting trees, etc.

Separate latrines must be amply provided for boys and girls, screened from observation, kept odorless, clean, covered, free from defacing marks, and supplied with toilet paper.

Out-of-door latrines must be placed at the back of the play-ground (below the level of, or draining away from a well or spring), separated as far as possible and supplied with sand or ashes. Toilet seats should be scrubbed frequently.

In-door latrines should be provided wherever possible, especially for the small pupils during the Winter.

Stables-Kept in good repair, and clean.

Cleanliness. School-room—Clean, tidy and well kept.

Mats and scraper for cleaning shoes at the entrance door.

Proper disposal of waste paper, food and articles from the class-room.

Pupils should wash hands after toilet, and before eating lunches.

Pencils or pens, if collected, should be redistributed so that each pupil receives his own.

Windows kept clean and screened from flies and mosquitoes.

To secure a minimum of dust, sernb and oil floors, sweep floor daily with use of oiled sawdust or sweeping compound, but never while the class-room is in use. Use oiled or damp dusters and dustless chalk. Wash blackboards and chalk rail.

Instructions given to pupils in the care of the school plant is a very valuable contribution to their health training.

## Early Symptoms of Disease

Early symptoms of communicable disease often develop with only a slight sore throat or a running of the nose. This is usually the stage of the disease, when disease germs are being discharged in largest numbers.

Fever also marks the beginning of most children's diseases and is indicated by headache, weariness, languid expression of the eyes, heat of the skin and rapidity of the pulse. Usually the cheeks are flushed, but they may be pallid.

Since parents may fail to recognize the early symptoms of mild attacks of communicable diseases, or, through ignorance or otherwise may fail to report to the Health Officer, when no physician is called, it is often necessary to rely on the school teacher where health inspection is not available.

In order that school teachers may be in a position to exclude pupils under their care, it is necessary for them to know what symptoms of illness should be observed in children and their possible significance. The following outline may prove useful for reference in an emergency:

## Symptoms of Illness in Children which should be observed by Parents and School Teachers, and their Significance

#### GENERAL SYMPTOMS

Any deviation from the normal in a previously healthy child.

Disinclination to study or play Unusual "tired feeling" Drowsiness Lack luster of eyes Cheeks flushed or pallid Symptoms of Fever; may be the beginning of an acute infectious disease or simply stomach trouble, intestinal infection or "cold."

These symptoms mark the beginning of most ohildren's diseases.

#### Chills

The earliest symptoms of many acute infectious diseases always demand attention.

#### Vomiting

May be due to simple gastrointestinal disorder (indigestion). May be early symptoms of scarlet fever or other communicable disease.

#### Sweating

May be profuse and has probably followed a preceding chill or fever.

Nervousness

Restlessness

Irritability

May indicate beginning disease of brain or spinal cord, or a functional nervous disorder, St. Vitus dance or epileptic fits. May be due to eye strain, skin disorder, insufficient sleep, etc.

#### Cough

May be beginning:
Whooping Cough;
Tuberculosis;
Measles;

Simple cold or influenza (grippe).

#### Loss of Weight

Particularly if associated with slight fever, swollen glands of neck, a limp, or pain in the back, may suggest tuberculosis.

Cold in the Head

Especially with running nose and eyes; first symptoms of measles, or German measles. May be simple cold or influenza.

#### Pallor

Indicates impoverished blood. With puffiness of the face may indicate kidney disease, especially after scarlet fever.

## Frequent Requests to go to the Toilet

May indicate trouble with bowels, kidneys or bladder.

#### LOCAL SYMPTOMS

#### Swelling in the Neck

May indicate:

Mumps;
Tuberculosis of glands;
Beginning of diphtheria;
Beginning of diphtheria;
Suppurating glands after searlet
fever or measles;
Bad teeth.

#### Eruptions of the Skin

May be one of acute infectious diseases.

May be one of communicable skin diseases, ringworm, impetigo.

If eruption is accompanied by scratching, may be (if on head) pediculosis or lice; (if on hands and body) scabies or itch.

**Discharges** 

If from nose, throat, ears or suppurating glands may be the result of measles or scarlet fever.

If irritating, creamy, or bloody from nose, may be nasal diphtheria. If from one nostril, may be foreign body in nostril.

Scowling
Squinting
Holding book improper
distance in reading

Symptoms of faulty eyesight

#### Headache

May indicate:
Defective eyesight;
Improper food;
Impaired digestion;
Excessive mental strain;
Bad ventilation in school;

Defective lighting in school, causing strain of the eyes.

#### Eves Red

May be "Pink Eye," eye strain or beginning of measles, or German measles.

#### Pink Eye

This is a form of acute catarrhal inflammation of a delicate membrane covering the eye and eyelids, caused by a germ. It is very readily communicated and at times occurs in epidemic form. Its symptoms are swelling and redness of the lids and surface of the eye. Frequently there is dread of light or even pain on exposure to the light. Cases should be excluded from school till the eye is white and free from inflammation, usually in one or two weeks. It is often conveyed by the use of the same towels, handkerchiefs, etc., by different children.

May be beginning of "Trachoma," which is a contagious disease of the eyelids.

It first attacks the inner surface of the eyelid, later it spreads to the eyeball itself and causes loss of sight. In the beginning the eyes may be red and watery and they may, from time to time, contain matter, but often for a long time there are no symptoms that the person notices, and the disease is frequently first discovered by the doctor. It is very difficult to cure traehoma, and it is the more difficult the louger the disease has lasted. For this reason trachoma should be detected as early as possible. It is contagious when secretion, that is to say, "matter," is present. This secretion is conveyed from the eyo of the person affected to the eye of the healthy person and thus sets up the disease. The secretion is for the most part conveyed by means of towels, washrags and handkerchiefs, and persons with trachoma should always be eareful that their towels, wash-rags and handkerchiefs are used by themsclves ouly. It is, therefore, most necessary that the greatest precautions should be taken in the homes and at school.

Children who have trachoma should not attend school unless they are regularly treated.

IF A CHILD HAS SORE EYES, HE SHOULD BE TAKEN TO A PHYSICIAN AS SOON AS POSSIBLE.

#### Eyes Discharging

May be granular lids or beginning of measles.

#### Sore Throat

May be first sign of:

Diphtheria;

Scarlet fever: Measles;

Tonsilitis; Septic sore throat.

#### Earache

May be due to adenoids or beginning of middle ear disease.

#### Running Ears

Middle ear infection (otitis). May be complication after infectious disease.

May be due to adenoids.

#### Pain

If referred to hip and accompanied by limp or inability to bear weight on limb, may be first symptoms of tuberculosis hip disease.

If referred to back, may be beginning of Pott's disease.

If referred to right side of abdomen, may be appendicitis.

If referred to back of ear, may be beginning of mastoid disease.

#### Malnutrition

All children who are habitually as. much as seven per cent. underweight for their height are malnourished. This degree of underweight means that the children are at least a whole year below the normal standards which they ought to have attained in weight and height. Parents and teachers describe their condition by some of these terms: Run down, delicate, thin, not himself, growing too fast, always tired, very seusitive, easily upset, nervous. In other words, they are stunted, and will probably so remain under their normal size unless the causes are found and removed. There is always a eause. You can help to correct it.

#### Signs of Malnutrition:

Bodily—Paleness, lines under the eyes, mouth breathing, flabby muscles, round shoulders, projecting shoulder blades, stooping posture, eurvaturo of spine.

Nervous—Restless, coutrary, timid, forgetful, inattentive, irritable.

#### Causes of Malnutrition:

Physicial Defects—Such as adeuoids, diseased tonsils, decayed teeth, defective eye-sight.

Lack of Home Coutrol—Parents should guide and control their children and create a happy atmosphere in the home.

Over-Fatigue—Late hours, overactivity, too hard school and social programs.

Faulty Food Habits—Eating irregularly, fast eating, too many sweets, tea and coffee, insufficient breakfast, too long a period between meals, not eating enough, improper food.

Faulty Health Habits—Especially lack of fresh air, worry, insufficient sleep and rest.

Therefore—Watch the children's weight! Study their food habits! See that they practise the Health Habits!

## QUARANTINE REGULATIONS and RULES for ISOLATION and EXCLUSION FROM SCHOOL

Disease	Principal Signs and Symptoms	Method of Infection	Earliest Date of Return of Patlent to School after Attack	Quarantine of Contacts After Last Exposure to Infection	Children Exposed at School	Remarks
CHICKEN- POX	Sometimes begins with feverishness, but is usually mild and without sign of fever. Rash appears on second day as small pimples, which in about a day become filled with clear fluid. This fluid then becomes pus and dries up, forming a crust. The rash appears on the body, neck and face. Chicken-pox is followed by scaling and bronze colored spots, which gradually fade.	Mouth spray, and fresh un- dried exu- date from cruption.	Until all scabs have disappeared from the skin, and the skin is smooth.	21 days for non-im-munes.  For im-munes. No.	Exciude from school until 11 to 22 days after child last saw patient.	When the child returns, examine the head for over-looked seabs. Seabs should have disappeared before the child is allowed to return to school.
DIPH- THERIA	This disease is manifested in from 2 to 5 days after exposure. Onset may be rapid or gradual. The early signs are those of sore throat with greyish white patches on the mucous membrane of the throat, palate or tonsils. There may be swelling of the glands of the neck, about the angle of jaw. Later in the disease there are pronounced symptoms of great debility and lassitude. The voice is often husky, and there may be a rough cough, called a croupy cough. Paralysis of the palate quite frequently follows a severe attack. If the nose is involved, there is a dischargo and frequent bleeding. If there is any doubt, a test should be made to detect the presence of diphtheria germs in the throat or nose. Anti-toxin should be given within the first 24 hours.	Discharges from mouth or nose in coughing, sneezing or spitting.	Untilpationt is recovered, and has 2 cultures from throat and nose taken 24 hours apart, which contain nodiphtheria bacilli. Disinfection of person.	8 days, then one nega- tive culture.	Exclude children from the same household until patient has been removed to hospital, and recovered, and negative cultures taken from all.	This is a very serious disease. When more than one case occurs in a classroom, all children in such classrooms should have cultures taken from the throat and nose. In this way carriers are detected. This disease varies greatly in its forms, and mild cases are sometimes not recognized. They are, however, as infectious as severe ones, so that every precaution should be taken. All exposed children should be immunized against this disease by an injection of diphtheria antitoxin by their own physician or the Health Officer. Membranous croup is a form of diphtheria and is readily communicable.
MEASLES	Begins from 10 to 14 days after exposure to infection like a cold in tho head with feverishness, running nose, infiamed and watery eyes, sneezing and coughing. The rash appears about the third day, and consists of small irregular groups of dull red, slightly raised spots. They are usually first seen on the neck belind the ears, on the forehead and face, and then rapidly spread over the entire body. The rash may almost disappear if the patient becomes chilled, but reappears when the patient again becomes warm. Grey colored spots usually appear on the inside of the cheek, two days before the rash shows on the skin.	Discharges from mouth or nose in coughing, sneezing or spitting.	Until re- covery and disinfection of patient, at least 2 weeks after isolation.	16 days for non-im-munes.  For im-munes. No.	Exclude from school until 8 to 15 days after child last saw patient.	This disease is the most readily communicable disease of childhood, infectious from the first day of invasion before the rash appears. Neglected or improperly treated cases frequently have serious after effects. Exposed children who change address should not go to a home where there are children who have not had measles. A child under 5 years of age is four times more likely to die of measles, than a child of 10 years of age; hence exposure should be avoided whenever possible, especially at an early age. Usually one attack protects from a second, but not always.
ROTHELN (Somotimes called German Measlos)	Illness usually slight, onset sudden. The rash is generally first noticed, and is paler and smaller than in measles. A characteristic symptom is the enlargement of glauds on both sides of the nock. Unlike measles there is no cold in the head, although the oyes may be inflamed and slight fever and sore throat accompany the attack. Devolops from 5 to 21 days after exposure to infection.	Discharges from mouth or nose in coughing, sncezing or spitting.	Until re- covery and disinfection of person, at least 10 days.	21 days for non-im- muncs. For im- munes. No.	Exclude from school until 11 to 22 days after child last saw patient.	After effects slight. Regulations strict, because frequently confused with Scarlet Fever.
SCARLET FEVER (Scarlatina)	Onset is sudden. Vomiting, sore throat, headache, fever or even convulsions may be first, symmetric first on the neck and upper part of chest, giving a scalded appearance. It appears as fine spots, evenly diffused, bright red in color, and lasts from 3 to 10 days, when it gradually fades. A pallor about the mouth stands out in contrast to the red lips and flushed face. In the early part of the disease tho tongue is usually whitish with bright red spots, known as the strawborry tongue. Later the tongue may be an intense red. The rash disappears after a few days, and the skin commonces to shed or peel in scales or flakes. The symptoms usually begin 1 to 7 days after exposure to infection.	Discharges from mouth or ness in coughing, sneezing or spitting. Suppurative discharges from the glands or ears. Milk especially apt to convey infection.	Until the end of 5 weeks, and when all scaling and peting and peting is ended, and there is an entire absence of discharge from the ears, nose or throat, and all suppurating glands are entirely healed	10 days.	Exclude from school until and days after child last saw patient.	Dangerous both during attack and from after offects. There is a great variation type of disease, and many mild cases are not recognized. Slight attacks are as infectious and as serious in its results as severe ones; but whether severe or mild. It is to be dreaded as a possible starting point of chronic diseases of the heart, ears or kidneys. The peeling may last from 6 to 8 weeks. A second attack is rare. When Scarlet Fever occurs in a school, all cases of sore throat should be sent home. Children changing address should not go to a home where there are children who have not had Scarlet Fover.
ACUTE SEPTIC SORE THROAT	Begins like cold in the head with bronchitis and sore throat and weakness. Throat diffusely reddened, and may show patches like diphtheria.	Discharges from the mouth or nose in coughing, sneezing, spit- ting.	Until re- covery 8 days.			Often leads to serious results. Affections of the heart, kidneys, etc. Very apt to cause epidemics if milk or other raw foods are contaminated.
MUMPS	Mumps is a disease which appears in about 21 days after exposure. Onset may be sudden, beginning with slight fever, pain and swelling about the angle of the jaw. The glands become swellen and tender, and the jaws stiff, and the saliva sticky. Opening the mouth widely may cause severe pain.	Discharges from the mouth or nose in coughing, sneezing or spitting.	When all glandular swelling has subsided.	18 days for non-im-munes.  For im-munes. No.	Ex.clude from school until 15 to 22 days after child last saw patient.	Very infectious, therefore early symptoms should be noticed and patient immediately excluded.
WHOOPING COUGH	Begins about 14 days after exposure, like cold in the head with bronchitis, sore threat, some fever and a cough which is worse at night. Characteristic whooping cough develops in about 2 weeks It occurs in paroxysms of short, quick coughs, followed by a long drawn-out inhalation of air, accompanied by the noise known as the whoop, and often ends in vomiting.	Discharges from the mouth or nose in coughing, sueezing or spitting.	When all cough has subsided.	14 days for non-im-munes.  For im-munes. No.		Complicatious are sometimes of a very grave nature. After effects often very severe and the disease causes great debility. It is especially infectious during the first weeks. There is a great variation in the type of disease. If a child vomits after a paroxysm of eoughling, it is most probably suffering from whooping cough. Second attacks are rare. The explosive nature of the cough disseminates the germs of the disease through the air, unless eare is taken to cover the mouth and nose when coughing.
SMALLPOX	Onset apt to be sudden, with backache or headache. Rash is seon first about the face and wrists. It appears about the third day, and consists first of small red spots which become elevated and hard like shot felt in the skin. In a few days little blisters form, filled with clear fluid. Later this fluid becomes pus, and then scabs form which fall off about the 14th day. Light cases are often mistaken for chicken-pox, a disease which seldom occurs in adults.	All dis- charges from tho nose, mouth sores and scabs con- voy infec- tion.	Five days after all crusts have fallen from tho skin.	16 days.	Exclude from school 22 days unless they bave been successfully vaccinated within 1 year, in which ease they may return at once.	This disease is particularly infectious. After the occurrence all persons in school or in the vicinity of the home of the patient should be vaccinated. Mild or modified Smallpox as infectious as severe type.  Severe fatal Smallpox may at any time be contracted from a mild case.
TUBER- CULOSIS	Occurs in the pulmonary form (Consumption) and is also froquently manifested by the enlargement of glands in the neck or inflammation of bones and joints. Its development is insidious and gradual, characterized usually by loss of appetite, weight and energy, also cough (with or without sputum), fover and rapid pulse.	All discharges from the body may contain the germs of tuber- culosis. Usually fromthe sputum and any dis- charging sores.	tubercle bacilli in the sputum.		Noed not be excluded.	Very communicable while the sputum and other discharges contain tubercle bacilli, unless adequate precautions are taken. Relapses are frequent.  See "What You Should Know About Tuberculosis."

DISINFECTION OF PERSON—The cleaning of the person includes washing the entire body and the hair with soap and water; thorough brushing of the teeth; rinsing the mouth, garging the throat, douching or spraying the nose with an antiseptic solution; and flually a complete change of clothing (or a change of underwear and a thorough shaking and brushing of the outer garments out of doors before these are put on again).

In any bome where there is a communicable disease of any character, other children should be excluded from school until they secure a certificate from the Health Officer or attending physician certifying that they may attend school without danger to others.

\*Immunes are those who have had the diseases, or (in Smallpox) have been successfully vaccinated.

NOTE.—Teachers should be familiar with the chart containing "Quarantine Regulations and Rules for Isolation and Exclusion from School" of children in whom or lu whose households communicable diseases exist. Large size charts may be obtained from the Department of Health and Public Welfare to place in the school.

## Care of the Eyes and Ears

The eyes and the ears are the most wonderful gutoways of the mind. Being the most delicate of organs they require care and protection against injury and disease. The eyes should receive an examination by an occulist when symptoms of eye strain or other defect and disease first appear. When an eye defect is present in a young child, he should receive prompt attention. To wait until he is older may be too lake to remedy the condition. In the same way, car troubles should never be neglected, otherwise serious results may cusure.

The eyes should be protected at all times from unshaded electric light. The eyes of infants are particularly sensitive, and require protection from too great light. Fucing the light when reading, writing or sewing, or when doing any close work, is harmful. The light should always fall from over the shoulder.

Eye strain may be caused by very small print, insufficient or flickering light, sudden clasure from a bright light to dark or vice versa, reading in strained, awkward posttons, reading in a moving vehicle, reading in bed by the convalencent child, and reading for tee long a period. The labit of holding the book at fourteen inches from the eyes in a proper position, and of looking away and resting the eyes at frequent intervals, will growtly lessen the danger of over-fatigue and strain.

Weak eyes cause a strain on the nerves resulting in pain or fatigue, inflamed condition of the eyes, headache, indigestion, nervousness, etc.

Eye diseases any be caused by wiping the eyes with a soiled towel, elath or handkerehief, and rubbing the eyes with soiled fingers, resulting in dangerous infections and blindness.

Eye injuries may be avoided by preventing children

From playing with sharp-pointed seissors, knives, sticks, air rifles, sling-shots, bows and arrows, fire-works, and other instruments of destruction:

From using a pointed object to aid in unitying shoe strings, or to cut toward himself with a knife;

From running about the vicinity of furniture with sharp corners, or in the brush or stubble.

Many meddents have occurred resulting in blindness, through neglect of proper regard for these dangers

Running cars should always receive treatment from a physician, as this condition may lead to very serious infection of the mastoid cells.

Deafness originating in early life is due largely to searlet fover and measles. Because of the close connection between the cars and the nose, a cold or any disease of the nose may easily affect the cars and impair the hearing.

Ear injuries may be avoided by the following rules:

Never strike anyone over the ears in fun or otherwise.

Never use hard or sharp-pointed objects like hair-pins to remove wax from the enr.

Never place oils or médicine into the ear, nor syringe the ear without medical advice.

Always call a physician if there is any foreign substance in the ear, such as insects, peas or beans.

Never allow a draught to strike the ear.

To place cotton in the ears to exclude water when diving.

## Care of the Nose and Throat

The health inspection of school children shows that in many instances they breathe through the mouth, because they cannot breathe properly or sufficiently through the nose.

This may be due to bad limbits in regard to keeping the nose elean, or, in a majority of instances, to a growth which is known as "adenoids" and which stops up the back of the nose. In either, the air is not breathed through the nose, and the child becomes what is known as a "mouth breather."

Constant breathing through the month causes the child to become pule, restless in his sleep, and dull in his actions. The child often speaks as though he had a cold in the head. Frequently there is no almost constant discharge from the nose.

Month breathing renders a child especially liable to contract thront troubles, tuberculosis and other communicable diseases; in fact, the child has very little resistance to diseases of any kind.

Every child should be given a handkerchief, and be taught to blow the nose gently several times a day. The proper method is to close one nostril with the flager and to blow steadily down the other, and repent the process through the opposite nostril. If, after doing this regularly, the child is still unable to breathe properly through the nose, it is probable that an adenoid growth is present, which is usually accompanied by an unhealthy condition of the tonsils. Such children should be taken to the family physician for advice and treatment.

Do not writ too long in the hope that the child will outgrow the condition, for the effect of adenoid growths and diseased tonsils persisting throughout childhood may injure him for life.

If your child contracts measles, searlet fever or diphtheria, have his throat and nose examined one month after recovery.

## Communicable Skin Affections

Pediculosis of the Head, Head Lice, or Vermin. 'This purusite is found on the scale, usually on the back part. The eggs or "nits" are small, whitish, pearshaped bodies, about the size of the head of a small pin, glued to the hair some distance from the scale, somewhat resembling scales of dandruff. The parasites attack the scale and course iteling and scratching. Series often result and a moist, scaly cruption may be found about the mouth, nostrils and cars. Children with live parasites or with "nits" should be excluded from school, and the following directions for treatment should be copied or printed and given to affected scholars to take home. On account of the uninaportance attached to personal cleanliness in many families, teachers may encounter opposition from purents of children excluded for this cause, and must be firm in insisting that therough treatment be carried out.

When a child is excluded from school on account of an intelean head emised by vermin or their eggs, the following remedies may be used in order to cure the condition:

Mix one-half pint of sweet oil and one-half pint of kerozone oil. Shake the mixture well and saturate the hair with the mixture, then cover the head entirely with a Lowel, leaving it on over night or for at least six hours.

#### KEEP AWAY FROM A LAMP OR FIRE

Atter removing the towel, wash the head as follows: To two quarters of warm water add one tenspoonful of sodium earbounte (washing sodu). Wet the hair with this solution and then apply eastile soup. But the tend theroughly until the oil has been entirely removed. Rinse the soup out of the hair with repeated washing of clear, warm, soft water, and then dry the fair theroughly.

If the head is washed regularly each week as described, it will remove and preyout "nits."

The child may then be sent back to school. The child may be re-admitted to school only when the result of the treatment is satisfactory.

All school children should have their hair combed duily with a thre comb.

Scables or Itch. This is a very readily communicable disease, a sort of inflammation of the skin emased by the presence of the itch mite in the skin. It shows itself by minute points or irritation, especially on the hands or wrists, which give rise to considerable itching. Later the, thread-like lines of irritation can be seen on the skin and soratch marks are prominent. Frequently the appearance is that of chapped hands or wrists. Cases should be excluded and referred for medical care. Saubias is spread by close contact, and will not disappear until proper treatment is given after which it is quickly cared.

Ringworm. Riugworm is a communicable skin disease. It gives rise to one or more circular patches of different sizes caused by a small living organism on the skin, and is accompanied by itching. The healing frequently first begins in the centre of the ring. When it occurs in the scalp it is characterized by a bald spot. Cases should be referred to a physician and excluded from school till the physician reports that the case has responded to treatment sufficiently to be no longer a source of disease.

Impetigo Contagiosa. This is an acute inflammatory communicable disease of the skin, which spreads very rapidly among children. It is characterized by the formation of one or more blisters or blebs the size of a split pea, which in a few days pass into yellowish crusts. The sores are usually found about the mouth, chin, nose and on the hands. Cases should be referred to a physician and allowed to return to school when well.

## Typhoid Fever

**Typhoid Fever.** Typhoid fever is usually transmitted by means of water, ice, milk, or food containing typhoid germs, or through the agency of the fly, or by actual contact between cases of typhoid fever and well persons.

Precautions against contracting the disease. For drinking purposes use only boiled water, or water of unquestionably good quality. For the washing of food that is to be eaten raw, and for the rinsing of household or dairy utensils, use water which has been boiled.

All milk should be brought to a boiling point, when the source of it is thought to be contaminated.

Raw shell-fish should not be eaten during the Autumn months when typhoid fever is prevalent. Cooking destroys the germs.

Avoid indigestible food, green fruit and other things liable to result in indigestion or diarrhoea, and so render the system more susceptible to infection.

Bathing at beaches or in rivers or lakes near the opening of a sewer should be strictly avoided.

Observe strictly the ordinary rules or personal and household cleanliness, and hygiene.

The windows and doors of all dwelling houses, and especially of the kitchen and dining room, should always be well screened, and flies kept out.

## Quarantine

Quarantine or isolation of a patient suffering from a communicable disease is sometimes a hardship and always an inconvenience; but is a requirement of the law, to protect the public. A person with a communicable disease is a menace to the health of others just as long as he is in contact with them. The officials charged with the enforcement of quarantine have no option in the matter, for the Public Health Act of the Province of Manitoba names the diseases which must be quarantined, along with the period of quarantine. Every assistance should, therefore, be given them to perform this duty in the interest of both the family and of the public. Quarantine law is based upon common sense and was enacted for the protection of the community. Any attempt to evade its requirements results in the spread of disease and needless suffering and loss of lives.

## The Conduct of a Quarantine or an Isolation Period for Communicable Disease in a Home

In order to limit the spread of communicable disease, it is of the utmost importance that the infectious agent should be destroyed as soon as it leaves the body.

Communicable diseases may be arranged in two groups. In the first group the infectious agent is generally confined to the discharges of the nose, throat, eyes, ears and suppurating glands. In the second group the infectious agent is found chiefly in the discharges of the bowels and urinary tract. With these facts in mind, the method of procedure for destroying the infectious agent is somewhat simplified, but in order to ensure success the proper technique must be rigidly observed.

The communicable diseases belonging to the first group are the following: Chicken-pox, diphtheria, epidemic cerebrospinal meningitis, epidemic or strepto-cocus (septic) sore throat, measles, mumps, poliomyelitis, searlet fever, smallpox, tuberculosis and whooping cough.

In the second group are typhoid fever, para-typhoid fever, dysentery and Asiatic cholera. Tuberculosis and poliomyelitis may fall in either group.

Directions to Mother or Nurse in caring for Patients affected with Chickenpox, Diphtheria, Epidemic Cerebrospinal Meningitis, Epidemic or Streptococcus (septic) Sore Throat, Measles, Mumps, Poliomyelitis, Scarlet Fever, Smallpox and Whooping Cough.

- 1. A room having good light and air, with an unfrequented approach, should be selected. Remove from the room the carpets, rugs, curtains, decorations, upholstered furniture, and all but a few toys of little value if patient is a young child. Kill all flies if present.
- 2. In addition to the bed and bedding, place in the room two plain tables and two plain chairs. Make provision for an abundance of boiling water. Provide a large slop pail with cover, two wash dishes, twelve towels, one at a time as needed. Provide at least three dozen squares of clean, old muslin or cheesecloth, 8 by 12 inches, for wiping discharges from nose and throat, eyes and ears. This should be boiled in water containing some washing soda, which renders the material sterile, soft and pliable. Two or three dozen pieces of gauze or muslin should be provided at a time. Where there is ample opportunity to burn materials, a supply of paper bags of proper size may be provided in which the soiled cloths may be placed for burning. Five per cent. and 2½ per cent. carbolic acid\* and a supply of bichloride of mercury tablets, colored to avoid accidents, should be provided. Permit all the sunlight and air possible to enter the room, consistent with the comfort of the patient. In fly season the windows must be screened.
- 3. The nurse must not leave the room occupied by the patient without first having washed her hands. Special care must be taken to guard against infection. Keep the hands away from the face while in the sick room.
- 4. The nurse should at all times when caring for the patient wear rubber gloves and a special gown, which must be removed when she leaves the room. If she leaves the house she should also change her outer garments.
- 5. A fresh, clean gown and cap should always be kept hanging outside the door for the use of the physician.
- 6. The outer clothing of the patient should be fully exposed to air and sunlight for 24 hours and then thoroughly brushed in the open air. The underclothing should be boiled for from 5 to 10 minutes. Woollen garments must not be boiled or placed in a solution of bichloride of mercury, but in a 5 per cent. solution of carbolic acid or liquor cresolis compositus.
- 7. The sheets and pillow cases should be soaked in  $2\frac{1}{2}$  per cent. carbolic solution for one hour and boiled for 20 minutes in soap-suds solution before being washed.
- 8. The door knobs, bed railing and woodwork about the patient should be wiped daily with a cloth which has been wrung out in 1 to 1000 bichloride of mercury solution.

<sup>\*</sup>A cheap substitute for carbolic acid is liquor cresolls compositus; made by dissolving 2.7 ounces potassium hydrate in 2 ounces of water, add 11.8 ounces linseed oil. Mix thoroughly. Add 17 ounces cresol, stir until clear, add sufficient water to make 34 ounces. Preparation should be made in a wooden bucket or eartbenware jar.

- 9. The dust should be removed from the room by means of damp cloths moistened with the bichloride solution and the cloths should afterwards be washed. Iu case of accidental contamination of any object or surface in the sick room by infective discharges, the discharge should be wiped up by cloths soaked in strong carbolic solution (5 per cent.) and the contaminated surface covered with strong carbolic solution (5 per cent.) for an hour.
- 10. Sputum, when in considerable quautity, should be received (if practicable) in paper cups which, with their contents, may then be burned. If this is not practicable, it may be received in ordinary cups containing the strong 5 per cent. carbolic solution. When not in large quantities, sputum and other infective discharges from the mouth, throat and nose, and discharges from the eyes and ears, should be received on cheap cloths or soft paper and promptly burned. If handkerchiefs are used to receive infective discharges, they must be placed in a wash basin and covered with 5 per cent. carbolic solution, or they may be placed in a paper bag and subsequently burned, or they may be boiled. After immersion for one hour in an abundant volume of the solution, handkerchiefs or other contaminated fabrics may be laundered. A fresh supply of clean cloths should always be available. The discharges from the bowels may be deposited in a toilet or fly-proof privy vault as usual.
- 11. Thoroughly cooked foods and drinks which have been boiled for ten minutes will be free from all disease germs.

Remnants of food from the sick room should be burued; or, if more convenient, soaked for an hour in 5 per cent. carbolic solution or in milk of lime or liquor cresolis compositus (used as indicated on page 12).

- 12. Eating utensils, such as knives, forks, spoons, dishes, etc., used by a patient affected with a communicable disease should be kept separate from other dishes and utensils, and after use should either be boiled for ten minutes in soap-suds or washed first in 5 per cent. carbolic solution, then in hot soap-suds and rinsed in water.
- 13. A proper diet is essential in order to prevent serious complications; hence specific instructions should be obtained from the physician.
- 14. It is especially difficult to keep children in isolation during convalescence unless something is provided to occupy their minds.
- 15. No person except those in charge of the patient should be permitted to enter the room during the isolation period.

When the quarantine is raised by the Health Officer, the person of the patient, including the entire body and hair, should be thoroughly washed with soap and water and clean clothing should be put on. The teeth must be brushed and an antiseptic gargle used for the throat, after which the patient may leave the room. If convenient, the patient should dress in an adjoining room.

16. If the patient has been well cared for during the illness, fumigation of the room will usually be unnecessary, but the floors, woodwork and bedstead must be scrubbed with soap and hot water. The bedding must be put out-of-doors in the sunlight for several hours, and beaten to remove the dust. Soiled sheets and pillow cases must be treated as noted on the previous page. Toys and books should not be given to the patient if they cannot be burned at the termination of the case. The Health Officer will determine and direct the method of procedure.

## Direction to Mother or Nurse in caring for Patients affected with Typhoid Fever, Para-Typhoid Fever, Dysentery, Asiatic Cholera and Poliomyelitis.

- 1. The room and its equipment must be the same as mentioned for the first group of diseases, except that in addition soveral pounds of unslaked lime will be needed.
- 2. In the above diseases the discharges from the bowels and the urine should be received in bedpans or other vessels containing a small amount of chloride of lime solution.\* A quantity of chloride of lime solution equal to twice the volume of the discharge should at once be added and fecal lumps broken up and thoroughly mixed. The receptacle with its contents, covered to exclude flies, should stand for at least an hour before being emptied into the water-closet, fly-proof privy or trench. Trench should be 1 foot wide, 3 feet deep and 4 feet long and covered to exclude flies.

<sup>\*</sup>l'repared by placing half the contents of a pound can of chloride of lime in one gallon of water.

After emptying the pans or other vessels which have received such discharges, they should be immersed in a disinfecting solution and the hands of the attendant should at once be carefully cleansed and disinfected. Neither the disinfection of the discharges nor the cleansing of the hands should be delayed.

The urine of typhoid fever patients contains the disease germs for several weeks after recovery, and should be treated as above until the physician or Health Officer certifies that all danger is past.

- 3. Clothing, bed linen and similar articles which have been contaminated with infective discharges should be soaked in carbolic solution (2½ per cent.) for one hour or longer. Then, after wringing out, they should be boiled for twenty minutes in a soap-suds solution, and laundered as usual.
- 4. Special care should be taken to exclude flies from the patient's apartment and to prevent the access of flies to the excretions.
- 5. The nurse should carefully wash her hands with soap and water and afterwards with 2½ per cent. carbolic or 1 to 1000 corrosive sublimate solution after handling the vessel containing the discharges from the patient. The same precautions should be taken by the nurse to prevent infection, as noted previously.
- 6. The discharges from the nose and throat do not usually contain the infective agent, but the hands of the patient may become infected; so that the cloths used to wipe the face, nose and mouth should be treated in the same manner and as carefully as for the diseases mentioned in the first group.
- 7. The same care of the room must be exercised and the nurse must care for her gown in the same way as mentioned above.
- 8. The nurse should not leave the room without first washing her hands with soap and water and drying them with a clean towel.
- 9. Visitors or other members of the family must not be allowed in the room without the physician's permission, and even then they must never sit on the bed or touch the patient in any way.

## Recovery from Acute Children's Diseases

Convalescence. After an attack of acute disease, there is a more or less lengthy period of gradual approach to normal health, and children should not be subjected to severe strain. Mothers should restrict undue exertion and teachers should see that the school lessons which the healthy pupils learn without fatigue are not allowed to prove a burden to children recently recovered from sickness; and should also be particularly watchful that in games with their fellows they do not overtax their strength. The muscles are often weakened by the disease, and not a few cases of heart disease have their origin at this time. If a child convalescent from scarlet fever contracts a cold, the infective agent may be present in the discharges from the nose and throat, hence the Health Officer may not allow scarlet fever cases to return to school for some time.

Complication. Many of the acute diseases of childhood are followed by complications, and mothers and teachers should be on the lookout for them, in order that they may receive early attention. After measles, or scarlet fever, inflammation of the ear, leading to chronic deafness is not infrequent. A weak heart often follows diphtheria. The poison of scarlet fever may affect the kidneys, and this is sometimes shown by puffiness under the eyes. Whooping cough renders a child an easy victim to other forms of communicable disease.

## Amusements for Convalescent Children

Convalescent children require certain recreational resources during the long interval of illness. These amusements or occupations, carefully fitted to the requirements of child patients, overcome to a great extent the habit of self-pity and selfish demands of physical illness, and assist in recovery as a means of regulated exercise. These considerations should be kept in mind in providing such amusements.

#### Babies up to Three Years

During the first year provide objects that may be placed in the mouth, i.e., ivory or silver ring spoon; and later, articles that appeal to the sense of sight, hearing and touch, i.e., hright objects, bells, tin dishes to clash together, paper suspended above the feet, a celluloid hall or bell or a rubber string to induce stretching, a rag doll, rubber animals, hoxes, bottles and hlocks.

For a busy mother, take a pasteboard box and fill it with harmless articles—a bright card, colored wool, an old tea strainer, etc., and other things that would in turn catch and hold the hahy's attention.

#### Children of Four to Six Years

Provide easy sectional puzzles, small nails to pound in to soap bars, soap bubbles to blow over a woollen shawl, a peg hoard made hy driving nail holes into a soft wooden board and using match sticks for pegs.

A small sand box or pan furnished with material to make scenery, a Noah's ark, tin soldiers, and other games that are short and simple.

#### Children of Seven to Nine Years

For children of this age, it is better to provide suggestive material, such as small boxes, spools, paste, paper, ribbons and yarns, or allow them to choose material from a piece hag. Making doll furniture, dressing clothes pins. making scrap books, playing competitive games and the reading of continued stories also furnish interest for these children.

#### Children of Ten to Twelve Years

At these ages there is likely to be an almost inexhaustible interest in puzzles and collections. Small metal and cardboard puzzles that are easily handled, stamps, postcards, posters and scrap hooks may he arranged and studied.

Stuffing and sewing dolls from patterns, bead work, weaving, clay modelling, braiding, spool knitting, coloring pictures are other diversions that will prove enjoyable.

#### Patients of Thirteen Years and Over

While young people are more resourceful, they are likely to demand considerable active companionship from their nurses. They may practise upon musical instruments, work old typewriters, solve difficult puzzles and problems, paint, play checkers and solitaire. Suitable reading will also help to shorten the tedious hours of convalescence.

Health habits form the basis of health training in the schools. However, these health habits should be formed early in childhood. Therefore, parents should begin such training as early as possible.

## Health Habits for Each Boy and Girl

- 1. I washed my hands before each moal.
- I washed not only my face, but my oars and neck, and I cleaned my finger nails.
- I drank a glass of water before each meal, and before going to bed, and drank no tea, coffee, nor other injurious drinks.
- 4. I brushed my feeth thoroughly in the morning and in the evoning.
- 5. I took ten or more slow, deep breaths of fresh air.
- 6. I played outdoors, or with windows open, more than thirty minutes.
- 7. I was iu bed teu hours or more last night, and kept my window open.

### I Shall Try Not to Forget:

- 8. To keep my fingers, pencils and everything that might be unclean, out of my mouth and nose.
- 9. To keep neat and cheerful constantly, and to be helpful to others.
- To sit up, and to stand up straight, to eat slowly, and to attend to toilet and each need of my body at its regular time.
- 11. To take a full bath at least twice a week.
- 12. To hold a handkerehief over my mouth and nose when coughing or sneezing.

## Safety First!

Always look in the direction you are going. Never leave a car when it is in motion.

Never put your head or arms out of a moving train or car,

If a horse becomes unmanageable, or runs away with you, the chances of escaping injury are better if you remain in the carriage.

In thunder storms keep away from trees and metallic substances.

Never play with firearms. Keep them out of reach of children.

Be sure to turn off gas; never blow it out.

Change wet clothing as soon as possible.

Avoid walking on a railroad track.

When awake, young child en should never be permitted to remain alone.

Do not take a light into, or light a match in a place where gas has escaped.

Fill and trim oil lamps in daytime.

Call the attention of the person responsible to anything that may cause an accident.

Keep matches in a closed tin box.

Never touch a wire you may find suspended in the street.

Never take medicine from a bottle without a label. (Throw it away.)

If a fire is in building, crawl on the floor (clearest air is in lower part of room). Cover head and face with a wet woollen wrap, cut holes for eyes.

If the fire is in kerosene, don't use water, as it will spread flames. Use dirt, sand or flour, or heavy woollen material.

Keep matches and medicines of all kinds out of the reach of children in your home.

Never allow a pin, needlo or tack to drop to the floor without picking it up. It may mean lockjaw for you or death for the child who may swallow it.

Do not allow stoves or furnaces to become overheated.

Do not use kerosene, benzine or other inflammable liquids in lighting a fire.

Do not allow paper or rubbish to accumulate in your cellar.

Never go out of a room and leave a lamp burning near a window curtain.

Do not go out of the house without putting on a wrap.